



Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number:

0 001 466
A1

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 78200215.8

(51) Int. Cl.²: C 09 D 3/49, C 08 F 299/00,
C 08 F 2/50

(22) Date of filing: 28.09.78

(30) Priority: 11.10.77 NL 7711121

(71) Applicant: Akzo N.V., IJssellaan 82, NL-6800 LS
Arnhem (NL)

(43) Date of publication of application: 18.04.79
Bulletin 79/8

(72) Inventor: Noomen, Arie, Schoonoord 22, NL-2215 Ed
Voorhout (NL)
Inventor: Wolters, Egbert, Potgieterstraat 21, NL-1053
XP Amsterdam (NL)

(84) Designated Contracting States: BE DE FR GB NL SE

(74) Representative: Sieders, René et al, P.O.Box 314,
NL-6800 AH Arnhem (NL)

(54) U.V.-curable coating composition.

(57) The invention relates to a coating composition which is curable under the influence of ultraviolet light and which comprises a U.V.-curable binder, a photoinitiator and as accelerator a tetrahydro-1,3-oxazine compound and/or an oxazolidine compound. The U.V.-curable binder is preferably an adduct containing at least one isocyanate group of

- a) an acrylic or methacrylic hydroxy ester having 5 to 20 carbon atoms and
- b) a polyisocyanate having 4 to 40 carbon atoms and 2 to 4 isocyanate groups.

A1

EP 0 001 466 A1

-1-

CLAIMS

1. A coating composition which is curable under the influence of ultraviolet light and is based on a U.V.-curable binder, a photo-initiator and a nitrogen-containing accelerator, characterized in that the accelerator is a tetrahydro-1,3-oxazine compound and/or an oxazolidine compound.
5
2. A coating composition according to claim 1, characterized in that the tetrahydro-1,3-oxazine compound and/or the oxazolidine compound is polyfunctional.
3. A coating composition according to claim 1, characterized in
10 that the tetrahydro-1,3-oxazine compound and/or the oxazolidine compound is low-molecular.
4. A coating composition according to claim 1, characterized in
that the oxazolidine compound is 2-isopropyl oxazolidine.
5. A coating composition according to claim 1, characterized in
15 that the tetrahydro-1,3-oxazine compound is di-(tetrahydro-1,3-oxazinyl)propyl adipate.
6. A coating composition according to claim 1, characterized in that
the oxazolidine compound includes one or more oxazolidine groups
20 which are attached to an oligomer chain or polymer chain by
the nitrogen atom.